Auto-Mate/DMX™

User Instructions

Elation Professional
4295 Charter Street
Los Angeles Ca. 90058
www.elationlighting.com

Rev. 10/04

Auto-Mate/DMX™ Contents

Features....2
Introduction....3
Safety Precautions....4
Connection and DMX Setup....5
Controls and Function....7
Operation (Plug and Play)....9
Installing Programs....10
Activate the Record-Mode....11
Data Exchange....12
Set Up Procedures
- Mighty Scan....13
- Max....14
- Pocket Scan....15
- X-Calibur....16
- Spiral Scan....17
- Rainbow250....18
- DJ Scan....19
- DJ Roller....20
- DMX Channel Settings....21

Cleaning....21
Warranty....22

Auto-Mate/DMX™ Features

- 256 DMX Channels
- 8 Chase Programs (4 x's 2 banks)
- 60 Scenes per a Program
- Sound Active
- Blackout Mode
- Built-In Microphone
- 19" Rackmount Design
- Capable of Data Exchange
- Programmable

Please Note: *Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.*

Auto-Mate/DMX™ Unpacking

Every Auto-Mate/DMX™ has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your controller for any damage and be sure all equipment necessary to operate the unit has arrived intact. In case damage has been found or parts are missing, please contact our toll free customer support number for further instructions, please do not return the controller to your dealer.

Auto-Mate/DMX™ Introduction

Introduction: The Auto-Mate/DMX™ is a Plug and Play DMX Controller with 8 programmed chases (4 slow and 4 fast). It has 256 DMX channels and each of the 8 Chases Programs can contain up to 60 steps. This unit comes with programmed chases for either the American DJ® Spiral Scan, DJ Scan, DJ Roller, Rainbow 250, Max, Mighty Scan, Pocket Scan, or X-Calibur. Be sure you have purchased the unit that comes with programs for your specific fixture. All the chases are designed to operate in conjunction with the Strobe, Fast, Slow, and Blackout functions. You can also store your own chases on any of the 8 program banks, by using an External DMX controller such as the Elation® Show Designer.™ Storing your own programs however, will erase any existing program that is stored in a particular memory bank.

Customer Support: Elation Profession® provides a customer support line, to provide set up help and to answer any question should you encounter problems during your initial set up or operation. You may also visit us on the web at www.elationlighting.com for any comments or suggestions. Service Hours are Monday through Friday 9:00 a.m. to 5:30 p.m. Pacific Standard Time.

Voice: (323) 582-3322
Fax: (323) 582-2610
E-mail: support@elationlighting.com

Caution! There are no user serviceable parts inside this unit. Do not attempt any repairs yourself, doing so will void your manufactures warranty. In the unlikely event your unit may require service, please contact Elation® customer support.

Do not discard the packing carton in the trash. Please recycle when ever possible.

Auto-Mate/DMX™ Safety Warnings

- Do not spill water or other liquids into or on to your unit.
- To reduce the risk of electrical shock or fire, do not expose this unit rain or moisture
- For adult use only - Keep out of the reach of children.
- Always use a power supply that meets the manufactures exact power specifications
- Be sure that the local power outlet match that of the required voltage for your power supply.
- Do not attempt to operate this unit if the power cord has been frayed or broken.
- Disconnect from main power before making any type of connection.
- Do not remove the unit covers under any conditions. There are no user serviceable parts inside.
- Never operate this unit when it's covers are removed.
- Never plug this unit in to a dimmer pack
- Always be sure to mount this unit in an area that will allow proper ventilation. The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- Do not attempt to operate this unit, if it becomes damaged in any way.
- This unit is intended for indoor use only, use of this product out doors voids all warranties.
- During long periods of non-use, disconnect the unit's main power.
- Always mount this unit in safe and stable matter.
- Cleaning -The fixture should be cleaned only as recommended by the manufacturer.

Auto-Mate/DMX™ Warranty Card

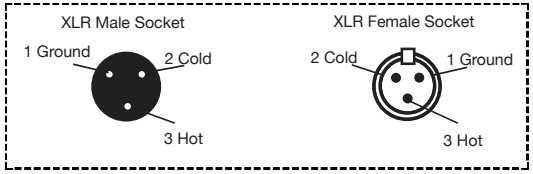
The Auto-Mate/DMX™ carries a two year limited warranty. We recommend you fill out the enclosed warranty card to validate your purchase. All returned service items whether under warranty or not, must be freight pre-paid and accompany a R.A.(return authorization) number. If the unit is under warranty, you must provide a proof of purchase invoice. You may obtain a R.A. number by contacting customer support.

Power Supply: Before plugging your unit in, be sure the source voltage in your area matches the required voltage for your Elation® Auto-Mate/DMX™ power supply. Connect the Auto-Mate/DMX™ to a main power supply using the included 12v AC power supply only. The Elation® Auto-Mate/DMX™ is available in a 120v and 220v version. Due to variations in line voltage from venue to venue, be sure to plug your power supply into a wall outlet with matching power before attempting to operate.

Data Cable (DMX Cable) Requirements: Connect the Auto-Mate/DMX™ and your fixtures together using standard 3 pin DMX cables (Figure 1). The Auto-Mate/DMX™ uses DMX-512 protocol to operate your fixtures. If you are constructing your own data cables, be sure to use standard two conductor shielded cable (This cable may be purchased at almost all professional sound and lighting stores). Your cables should be made with a 3-pin male and female XLR connector on either end of the cable. Also remember that DMX lines must be daisy chained and can not be split.

Figure 1

Notice: Be sure to follow figures two and three when making your own cables. Do not use the ground lug on the XLR connector. Do not connect the cable's shield conductor to the ground lug or allow the shield conductor to come in contact with the XLR's outer casing. Grounding the shield could cause a short circuit and erratic behavior.



XLR Pin Configuration
Pin 1 = Ground
Pin 2 = Data Compliment (negative)
Pin 3 = Data True (positive)

Figure 2

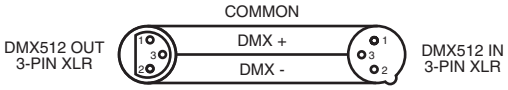


Figure 3

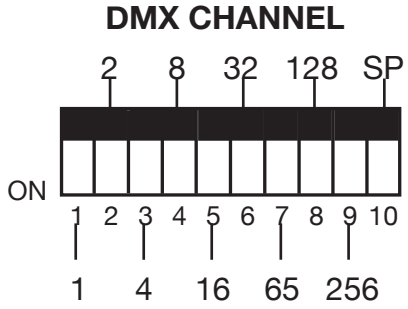
Special Note: Line Termination. When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behavior. A terminator is a 90-120 ohm 1/4 watt resistor which is connected between pins 2 and 3 of a male XLR connector (DATA + and DATA -). This unit is inserted in the female XLR connector of the last unit in your daisy chain to terminate the line. Using a cable terminator will decrease the possibilities of erratic behavior.

Termination reduces signal errors and avoids signal transmission problems and interference. It is always advisable to connect a DMX terminal, (Resistance 120 Ohm 1/4 W) between PIN 2 (DMX-) and PIN 3 (DMX +) of the last fixture.

Figure 4

DMX is short for Digital Multiplex. This is a universal binary language used as a form of communication between intelligent fixtures. Each dip switch represents a binary value.

Dip Switch 1 address equals 1
Dip Switch 2 address equals 2
Dip Switch 3 address equals 4
Dip Switch 4 address equals 8
Dip Switch 5 address equals 16
Dip Switch 6 address equals 32
Dip Switch 7 address equals 64
Dip Switch 8 address equals 128
Dip Switch 9 address equals 256
Dip Switch 10 address equals 512 - This switch is sometimes used to activate a fixtures special functions.



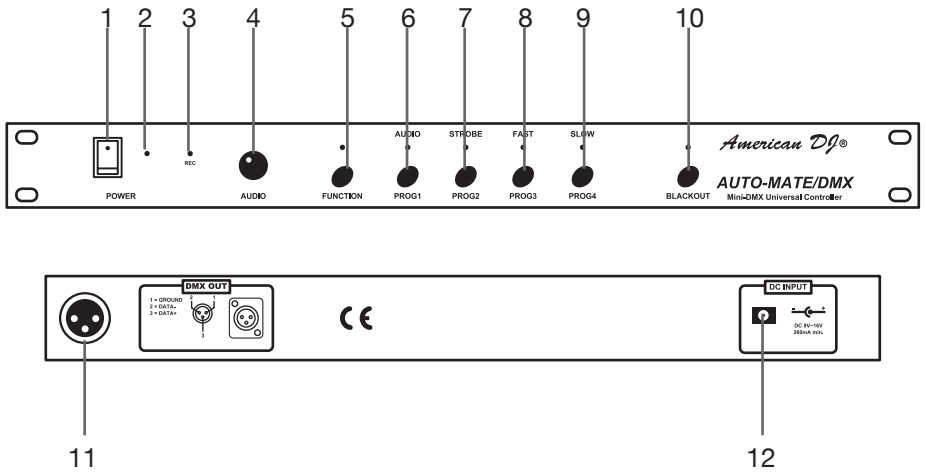
A DMX value (address) is set by combining the different dipswitches that will add up to the value you wish to achieve, for example:

Setting DMX address for 21.
Flip switches 1, 3, & 5 to the "ON" position

Dipswitches # / Value
1 = 1
3 = 4
5 = 16
= 21

Set DMX address for 201.
Flip switches 1, 4, 7, & 8 to the "ON" position

Dipswitches # / Value
1 = 1
4 = 8
7 = 64
8 = 128
= 201



1. Power Switch -
This switch turns on the unit's main power.

2. Power Indicator -
This yellow LED will glow when main power is activated. This LED will flash briefly when program mode is activated.

3. Microphone -
The unit comes with a built-in microphone designed to pick-up on low frequencies. The unit then uses this signal to trigger program succession.

4. Audio Sensitivity Knob -
This knob is used to adjust the unit's sensitivity to sound. When the knob is turned in a clockwise direction, the unit becomes more sensitive to sound, when this knob is turned in a counter-clockwise direction the unit becomes less sensitive to sound. Usually the more sensitive to sound the unit is, the faster the programs will chase.

5. Function Button -
This button is used to change the functionality of the Audio/Prog 1, Strobe/Prog 2, Fast/Prog 3, and Slow/Prog 4 Buttons. Engaging the function button will allow the "Audio," "Strobe," "Fast," and "Slow" modes to operate. The red function LED will glow when function level two is active.

6. Audio/Prog 1 Button -
This button serves two functions. When the function level two is engaged, this button will activate sound-active mode. When the function level one is engaged, selecting this button will active the program stored in this bank.

7. Strobe/Prog 2 Button -
This button serves two functions. When the function level two is engaged, this button will activate strobe mode. Strobe mode will initiate a strobe function to any program running. When the function level one is engaged, selecting this button will active the program stored in this bank.

8. Fast/Prog 3 Button -
This button serves two functions. When the function level two is engaged, this button will activate the first bank of four programs. When the function level two is engaged, selecting this button will active the program stored in this bank.

9. Slow/Prog 4 Button -
This button serves two functions. When the function level two is engaged, this button will activate the second bank of four programs. When the function level two is engaged, selecting this button will activate the program stored in this bank.

10. Blackout Button -
This button activates blackout mode. In blackout mode all fixture actively will enter into stand-by mode - No light output - No mirror movement.

11. DMX Output Jack -
This jack sends the controllers DMX signal to your fixtures. This jack uses a standard 3-pin XLR female connector.

12. Power Supply Input Jack -
Only connect a recommended power supply AC 9v~12v, 250mA. Use of a power supply other than a recommend power supply could damage your unit and will void your manufactures warranty.

Set-Up:

Before attempting any operation, be sure you set up your system properly. Also, be sure all DMX setting are properly adjusted. Refer to the last pages of this manual for proper fixture positioning and DMX channel settings that correspond with the fixtures you will be using. If you will be customizing the Auto-Mate/DMX™ (creating your own programs), always leave the first 4 DMX Channels (000 – 003) free, the Auto-Mate/DMX™ needs these channels for internal instructions. All DMX fixtures should always start on DMX a address 004.

Function Levels:

The Auto-Mate/DMX™ has two different function levels. Function level one is the default setting and will be indicated when the red LED above the function key is not glowing. A red LED located above the function key indicates function two. Function level one allows you access to, and changes the four available chase programs patterns. Function level two allows you to change the different operating modes.

Operation (Plug and Play):

When switching the Auto-Mate/DMX™ on, it will immediately enter blackout mode. Selecting any of the four program buttons under function level one will immediately begin program playback.

Function level 1: (Red LED Off):

Selecting any of the four PROG keys while the Function LED is not glowing will initiate any program stored in the corresponding memory bank. A green LED above the selected program will indicate which program is selected. When you select a new program the corresponding green LED will begin to glow.

Function level 2: (Red LED On):

Tapping the Fast or Slow Key more than once will stop the program. The fixtures will not blackout, but will freeze on a scene. Tapping Fast or Slow again will continue the program from that point. This function will be indicated when either the Fast or Slow key LED indicator is flashing. To exit this function, deselect the fast or slow key or begin a new program.

Blackout:

The function will stop the running program and will close the shutters of all fixtures.

Installing your own Programs:

A second way you can use the Auto-Mate/DMX™ is to store your own programs from an external DMX Controller such as the popular Elation® Show Designer.™ These programs can then be used to automatically run your unit as the original built in program would. This operation allows you to customize your programs to meet your individual needs.

Procedure:

First, program your desired scenes in any DMX Controller. You can create a total of eight programs, four programs can be stored on bank one (*Fast*) and four can be stored on bank two (*Slow*). The programs can not consist of more than 256 DMX channels and 60 scenes or steps.

When you have created programs, upload them Scene by Scene to the Auto-Mate/DMX.™ When programming the Auto-Mate/DMX,™ the DMX Information for the time interval between scenes, the Strobe function, and the Blackout function must be programmed separately. When uploading your scenes to the Auto-Mate/DMX™ use DMX Channel 001 to set the time interval between your scenes, use DMX Channel 002 to set the strobe information in your scenes, use DMX Channel 003 to set the blackout information.

Activate the Record-Mode:

In order to modify or install programs the unit must be in Record Mode. To activate record mode:

1. While the unit is turned off, press and hold down the Function Button (5).
2. Turn the power on while holding down the function button (5).
3. After the unit is turned on, the power LED will flash 5 times indicating record mode has been activated.

Installing the Strobe and Blackout Functions:

1. Turn on a scene via DMX with Shutter = “open”.
2. Press the Function Key until the LED goes on.
3. To store this scene press, the Strobe and Blackout Keys at the same time. The REC. LED will come on after 3 sec.
4. Push the Blackout Key at the Master Controller. Use the same scene you used for step 1, Shutter = “open”)
5. Press the Blackout Key at the Auto-Mate/DMX™ the REC. LED will come on after 3 sec.
6. Switch off the master unit’s blackout function.
7. Activate the Strobe Function in the same scene. Change only the DMX channels that activate the Strobe function.
8. Press the Strobe Key at the Auto-Mate/DMX™ Controller. After three seconds the REC LED will temporarily glow.

Upload Scenes to the Auto-Mate/DMX™

1. Selected a program (1 through 4) that will hold your scene (be sure the function LED is off).
2. With the red function indicator on, choose either Fast (1.4 second maximum scene hold time) or slow (5.8 second maximum scene hold time).
3. From your external DMX controller, turn on you are going to send to the Auto-Mate/DMX™
4. The default scene hold time is 1/10 of a second. You may use DMX channel one on your external controller to change the scene hold time.
   - Slider value 10 is equal to one second.
   - Slider value 20 is equal to two second.
   - Slider value 30 is equal to three second etc...

4. Save scene into memory by pressing the Audio Key, when the scene has been stored into memory the Rec LED will turn off.
5. Repeat step three and four until you have stored all your desired scenes or you have reached the maximum of 60 scenes
6. Once you have completed transferring scenes from the external controller, turn the controller off to exit

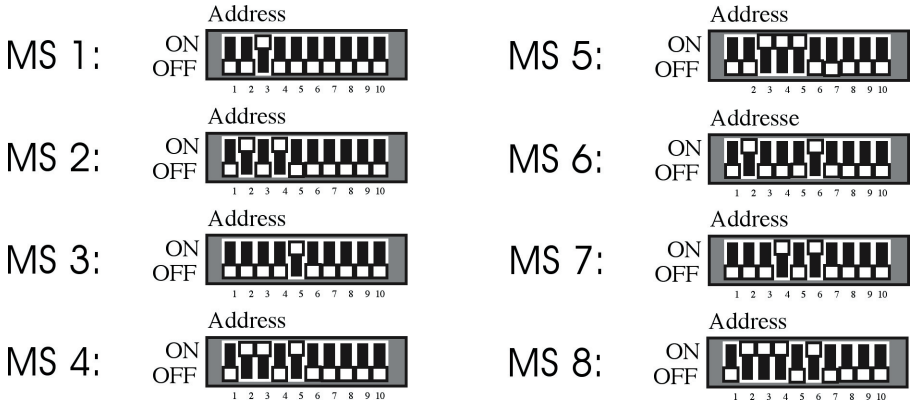
Transferring programs between two Auto-Mate/DMX™ units:

This unit allows you to transfer data from Auto-Mate/DMX™ to Auto-Mate/DMX™ for back-up or data swap purposes. For this procedure you will need to construct or purchase a male to male 3-pin XLR cable.

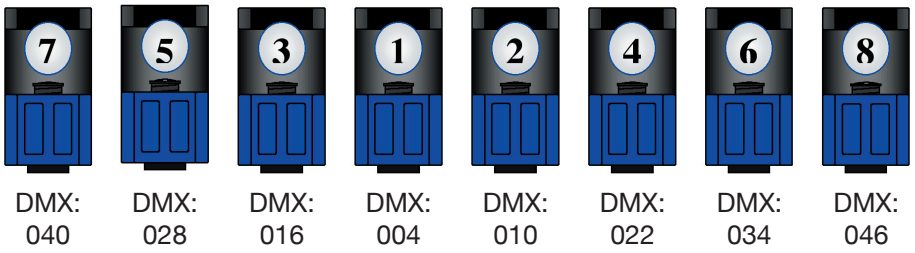
1. Link your two units together via the XLR connections on the rear of each unit.
2. Set both controllers to the Record Mode, see page 11 *“Activating the Record-Mode.”*
3. On the “Master” controller, the controller that will act as the sending unit, press the Function Key (5) until the red function LED indicator begins to glow.
4. On the “Master” controller, the sending controller unit, press both the Fast and Slow function key at the same time. The pro gram LEDs on both units will begin to flash and chase. This will indicate programs are being transferred successfully.
5. The process is completed when all the program LEDs stop chasing.

If the data transfer was successful, the same program LEDs will be glowing on both units. If the same program LED are not on, there was an upload error. Please repeat this procedure once again.

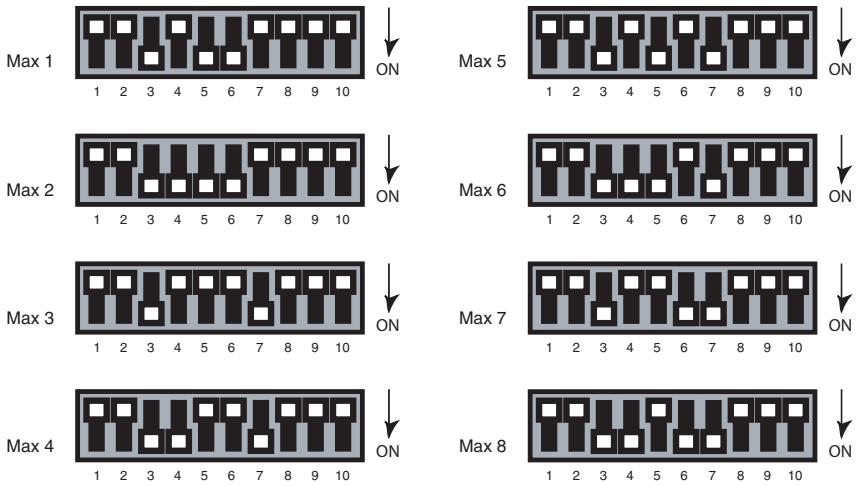
MIGHTY - SCAN



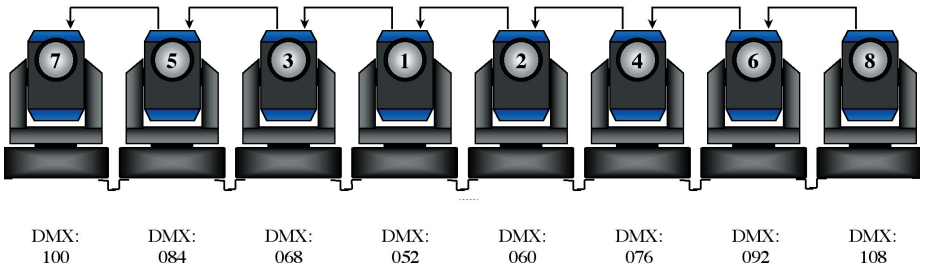
When using only four units in your system ignore the settings and positioning for fixtures 5, 6, 7, and 8



MAX



When using only four units in your system ignore the settings and positioning for fixtures 5, 6, 7, and 8



POCKET SCAN

Pocket Scan 1

Pocket Scan 2

Pocket Scan 3

Pocket Scan 4

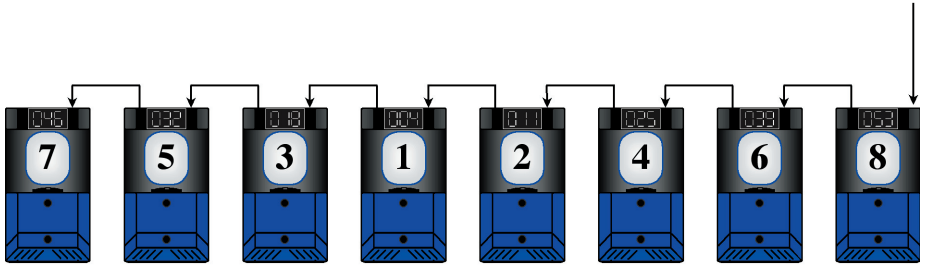
Pocket Scan 5

Pocket Scan 6

Pocket Scan 7

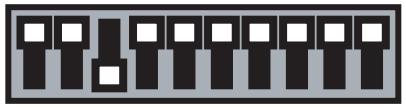
Pocket Scan 8

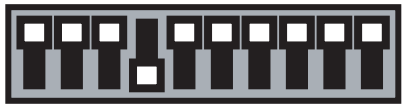
When using only four units in your system ignore the settings and positioning for fixtures 5, 6, 7, and 8



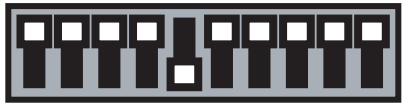
DMX: 046 DMX: 032 DMX: 018 DMX: 004 DMX: 011 DMX: 025 DMX: 039 DMX: 053

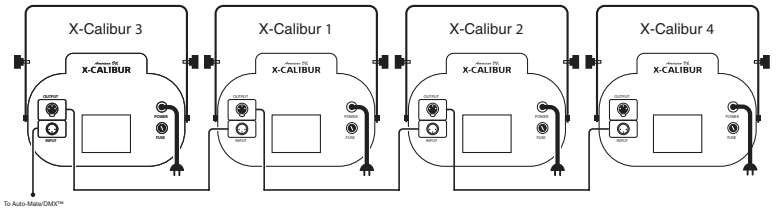
X-CALIBUR

X-Cal 1 

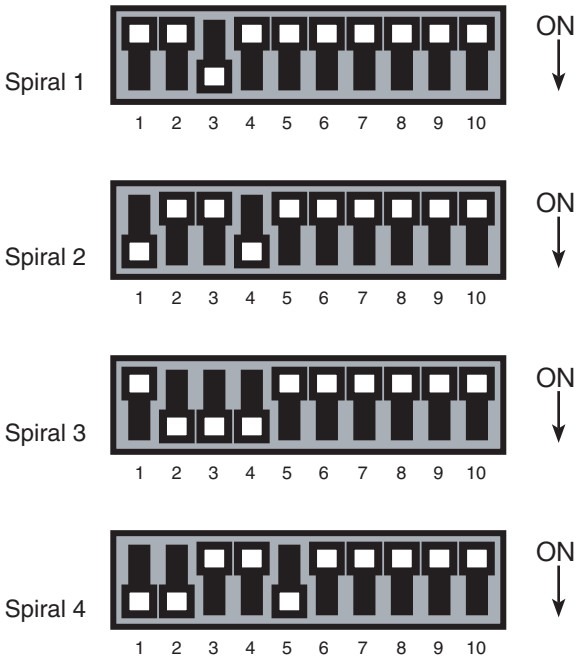
X-Cal 2 

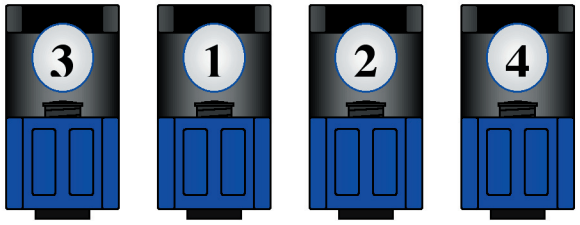
X-Cal 3

X-Cal 4 

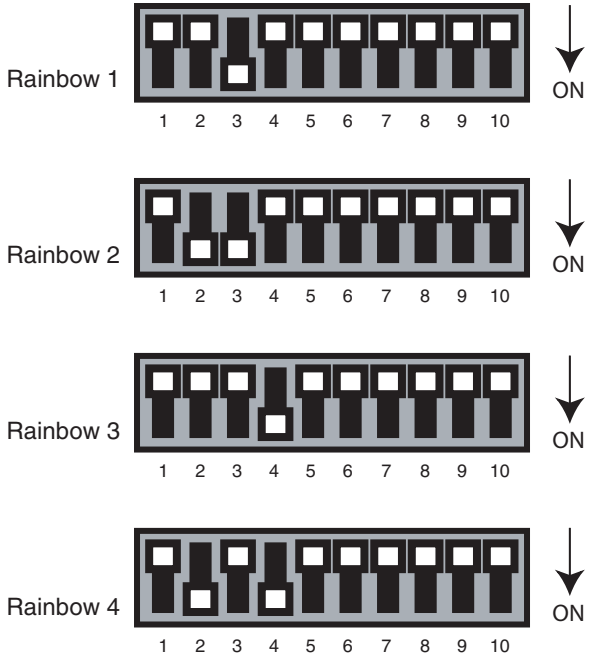


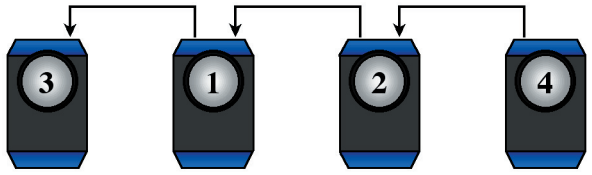
DMX: 012 DMX: 004 DMX: 008 DMX: 016



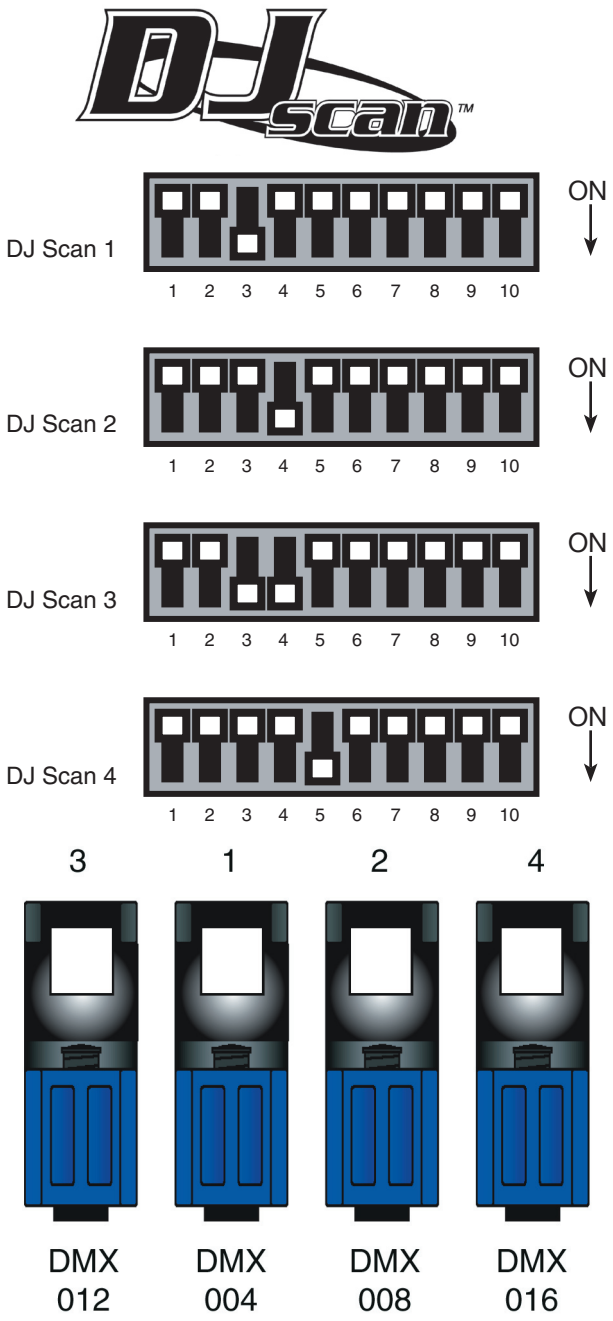


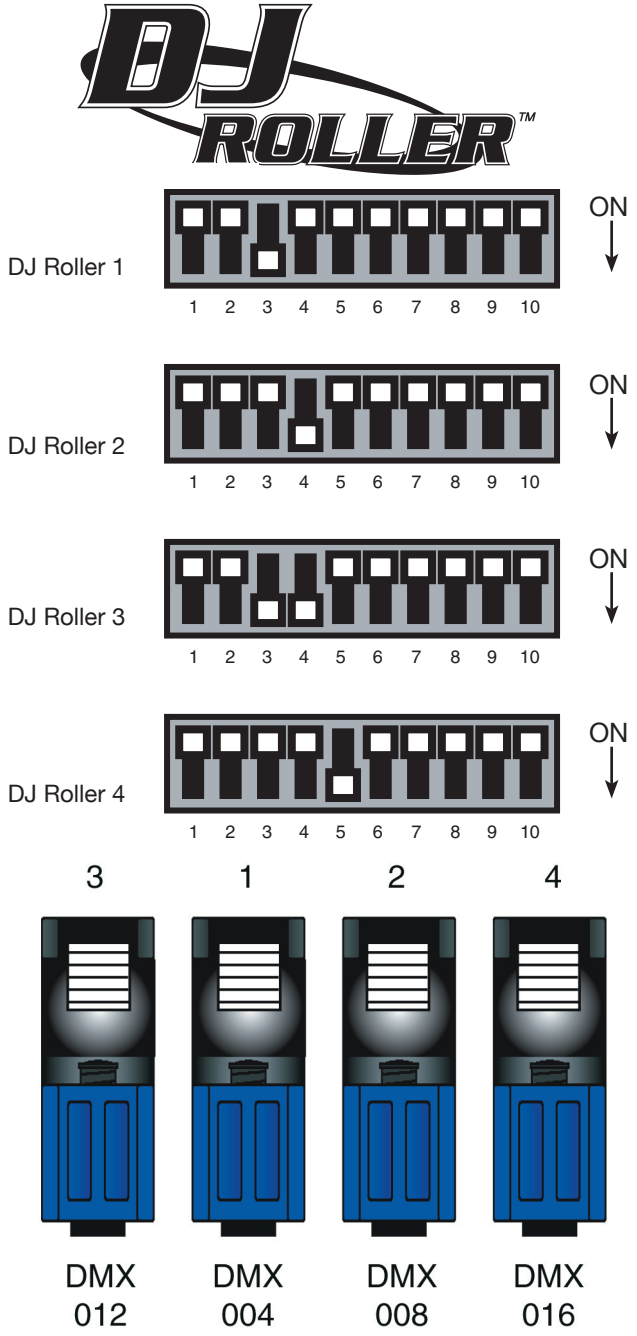
DMX: 014 DMX: 004 DMX: 009 DMX: 019





DMX: 008 DMX: 004 DMX: 006 DMX: 010


DJ Scan 1
ON
1 2 3 4 5 6 7 8 9 10
DJ Scan 2
ON
1 2 3 4 5 6 7 8 9 10
DJ Scan 3
ON
1 2 3 4 5 6 7 8 9 10
DJ Scan 4
ON
1 2 3 4 5 6 7 8 9 10
3 1 2 4
DMX 012
DMX 004
DMX 008
DMX 016


DJ Roller 1
ON
1 2 3 4 5 6 7 8 9 10
DJ Roller 2
ON
1 2 3 4 5 6 7 8 9 10
DJ Roller 3
ON
1 2 3 4 5 6 7 8 9 10
DJ Roller 4
ON
1 2 3 4 5 6 7 8 9 10
3 1 2 4
DMX 012
DMX 004
DMX 008
DMX 016

FIXTURE	DMX CH.	DMX CH.	DMX CH.	DMX CH.
ACCU SPOT 250	Ch 020	Ch 004	Ch 012	Ch 028
SPIRAL SCAN	Ch 014	Ch 004	Ch 009	Ch 019
X-CALIBUR	Ch 012	Ch 004	Ch 008	Ch 016
MIGHTY SCAN	Ch 017	Ch 005	Ch 011	Ch 023
DJ-SCAN	Ch 012	Ch 004	Ch 008	Ch 016
RAINBOW 250	Ch 008	Ch 004	Ch 008	Ch 010
MAX	Ch 068	Ch 052	Ch 060	Ch 016
ACTIVE SCAN250	Ch 016	Ch 004	Ch 010	Ch 022
ACCU SPOT 250	Ch 020	Ch 004	Ch 012	Ch 028

Due to fog residue, smoke, and dust, cleaning the unit should be carried out periodically to optimize light output.

1. Use normal glass cleaner and a soft cloth to wipe down the outside casing.
2. Use a cleaner specially designed for electronics to spray in and around the knobs and switch. This will reduce small particle built up that can effect the proper operation of the controller.
3. Clean should be carried out every 30-60 days.
4. Always be sure to dry all parts completely before plugging the unit in.

Cleaning frequency depends on the environment in which the fixture operates (i.e. smoke, fog residue, dust, dew).

2-YEAR LIMITED WARRANTY

A. Elation® hereby warrants, to the original purchaser, Elation® products to be free of manufacturing defects in material and workmanship for a period of 2 Years (730 days) from the date of purchase. This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.

B. For warranty service, send the product only to the Elation® factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, Elation® will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, Elation® shall have no liability whatsoever for loss of or damage to any such accessories, nor for the safe return thereof.

C. This warranty is void if the serial number has been altered or removed; if the product is modified in any manner which Elation® concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the Elation® factory unless prior written authorization was issued to purchaser by Elation®; if the product is damaged because not properly maintained as set forth in the instruction manual.

D. This is not a service contract, and this warranty does not include maintenance, cleaning or periodic check-up. During the period specified above, Elation® will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of Elation® under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Elation®. All products covered by this warranty were manufactured after January 1, 1990, and bear identifying marks to that effect.

E. Elation® reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured.

F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by Elation® in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The consumer's and or Dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall Elation® be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.

G. This warranty is the only written warranty applicable to Elation® Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

MODEL: AUTO-MATE/DMX™

SPECIFICATIONS:

VOLTAGE:	9v~12v AC
WEIGHT:	2.5 LBS / 1.5 KGS.
FUSE:	2 AMP GMA (INTERNAL)
WORKING POSITION:	ANY SAFE POSITION
PROGRAMS:	8 TOTAL (2 BANKS) 60 SCENES PER A PROGRAM
DMX CHANNELS:	256 (3 CHANNELS USED FOR SYSTEM)
POWER CONSUMPTION:	TYPICAL 2 AMPS

©Elation Professional
Elation World Headquarters:
4295 Charter Street Los Angeles, CA 90058 USA
Tel: 323-582-2650 Fax: 323-582-2610
Web: www.elationlighting.com E-mail: info@elationlighting.com